

BEFORE THE PUBLIC UTILITIES COMMISSION OF THE
STATE OF HAWAII

In the Matter of

PUBLIC UTILITIES COMMISSION

Instituting a Proceeding to Investigate the
Implementation Of Feed-in Tariffs.

DOCKET NO. 2008-0273

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**BLUE PLANET FOUNDATION'S INITIAL STATEMENT
OF POSITION AND PROPOSED FEED-IN TARIFF**

AND

CERTIFICATE OF SERVICE

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**BLUE PLANET FOUNDATION'S INITIAL STATEMENT
OF POSITION AND PROPOSED FEED-IN TARIFF**

Blue Planet Foundation ("Blue Planet"), by and through its attorneys Schlack Ito Lockwood Piper & Elkind, hereby submits its Initial Statement of Position and Proposed Feed-In Tariff ("Proposed FIT").¹

Blue Planet is a public interest organization dedicated to promoting Hawaii's swift transition to a clean energy economy through the rapid adoption of renewable energy, both to establish Hawaii as a global model and to confront the urgent issue of climate change. Unlike most intervenor parties, Blue Planet is not a commercial interest or governmental agency and its primary focus is championing the broader economic and environmental benefits to all Hawaii from the rapid transition to a clean energy economy.

Consistent with its mission, Blue Planet strongly favors the adoption of a robust feed-in tariff ("FIT") capable of achieving and indeed surpassing Hawaii's stated energy policy goals. Based upon its preliminary evaluation of the Joint Proposal² and Straw Tariff³ submitted

¹ Blue Planet's SOP is timely filed in accordance with the February 25, 2009 deadline established by the "Order Approving the HECO Companies' Proposed Procedural Order, As Modified" issued by the State of Hawaii Public Utilities Commission ("Commission") on January 20, 2009 ("Procedural Order"). *Id.* at 12.

² "Joint Proposal on Feed-in Tariffs of the HECO Companies and Consumer Advocate" dated Dec. 23, 2008 ("Joint Proposal").

³ On January 15, 2009, HECO distributed draft versions of its proposed Schedule FIT Tariff, Schedule FIT Agreement (Appendix I), Schedule FIT Overview (Appendix II), and Schedule FIT Program Overview (Appendix

by the HECO Companies⁴ and the Consumer Advocate,⁵ however, it appears to Blue Planet (and other intervenor parties) that the promise of an FIT in Hawaii may go unfulfilled unless the Commission adopts an FIT more similar to the Proposed FIT than to the Straw FIT.

The potential benefits of an FIT are well established. As explained in the report prepared by KEMA, Inc. ("KEMA Report"), and submitted by the HECO Companies and Consumer Advocate in support of their Joint Proposal:

Feed-In Tariffs (FITs) have driven rapid renewable energy market growth internationally and have created empirical benefits for countries that have designed them effectively. Based on international experience to date, the potential benefits of a feed-in tariff policy include:

- Rapid renewable energy market growth: The world's leading wind energy and solar energy markets, such as Germany and Spain, have relied on FITs to rapidly expand their installed renewable energy capacity. At the end of 2007, Germany and Spain had installed a total of 37,768 MW of wind power, or 2.5 times more capacity than the United States. This is particularly remarkable since Spain and Germany represent only 9.2 percent of total U.S. landmass combined. Both countries have also rapidly expanded the share of renewable energy in their portfolios. Germany, for example, expanded its share of renewable electricity from approximately 6 percent in 2000 to over 14 percent in 2007, reaching its 2010 goal of 12.5 percent three years ahead of schedule.
- Reduction of project developer costs, risks, and complexity without significantly increasing ratepayer cost: FITs reduce developer cost and risk because they are standard offers available to generators without the need for potentially lengthy and costly competitive processes. The simplicity and lower transaction costs of FITs lowers the cost of project development, reduces the rate of contract failure, and also increases the ability for small businesses and small projects to develop renewable energy systems.

III) to the intervenor parties in "straw format" ("Straw Tariff"). E-mail from M. Chun (HECO) to Intervenor Parties dated Jan. 15, 2009.

⁴ Hawaiian Electric Company, Inc.; Maui Electric Company, Limited; and Hawaii Electric Light Company, Inc.

⁵ State of Hawaii Division of Consumer Advocacy of the Department of Commerce and Consumer Affairs.

- Reduction of investor risk and policy cost: By basing incentive levels on the cost of generation plus a reasonable return, FITs create a high degree of investor security. By lowering investor risk, FITs also lower financing costs, and therefore reduce policy costs. A recent International Energy Agency analysis found that policies that reduce investor risk, such as FITs, can be 10 percent-30 percent less costly than other policy types. Analyses from both Europe and the U.S. have also concluded that FITs have a comparatively lower cost than policy types that employ riskier competitive mechanisms such as tradable credits. In Hawaii, FITs based on generation cost may also generate savings since generation costs for certain technologies may be below current avoided cost levels.
- Economic development and job creation: Renewable energy creates more jobs than other energy industries and also has a higher multiplier impact on local economies than does conventional energy development. To the extent that FITs can drive renewable energy development more rapidly than other policy types, these local job creation benefits can be achieved on a quicker timescale. Germany, for example, employed over 250,000 in the renewable energy industry in 2007, an increase of more than 90,000 jobs since 2004.
- Targeted technology development and innovation: Generation cost-based FITs can be used to target specific types of renewable energy development. In Germany, FITs are used to support innovative technologies such as Sterling engines and organic Rankine cycles, for example, whereas the proposed feed-in tariff in Minnesota would support community owned projects. Hawaii has an opportunity to develop unique FITs that would simultaneously support renewable energy development and grid integration technologies. FITs for intermittent resources coupled with expanded under-frequency ride through capability, for example, would allow Hawaii to move more quickly towards its ambitious long-term portfolio goals. Hawaii would also be well positioned to export innovative grid integration strategies as other states and countries reach higher renewables penetration levels in the future.

Id. at 1-3 (footnotes omitted) (emphasis added).

Based upon its preliminary determination that the Straw Tariff appears unlikely to fully realize these and related economic and environmental benefits, Blue Planet has developed

its Proposed FIT in collaboration with other intervenor parties. *See* Proposed FIT, attached as Exhibit A. Blue Planet first responds to the issues established by the Commission pursuant to the Procedural Order and then further comments on the Proposed FIT.

I. PROCEDURAL ORDER ISSUES

A. Purpose of Project-Based Feed-in Tariffs (PBFiTs)

1. What, if any, purpose do PBFiTs play in meeting Hawaii's clean energy and energy independence goals, given Hawaii's existing renewable energy purchase requirements by utilities?

The purpose of an FIT,⁶ in accordance with the primary goal of the Energy Agreement,⁷ is to accomplish the stated objective of Governor Linda Lingle, the U.S. Department of Energy, the State of Hawaii Department of Business Economic Development and Tourism, the Consumer Advocate, and the HECO Companies to “move decisively and irreversibly away from imported fossil fuel for electricity and transportation and towards indigenously produced renewable energy and an ethic of energy efficiency.” *Id.* Blue Planet submits that an FIT similar to the Proposed FIT has the potential to stimulate rapid development of renewable energy in Hawaii move toward achieving this overarching and controlling policy objective.

In addition, the FIT can assist the utilities in achieving the requirements under the Renewable Portfolio Standards set forth in Part V of chapter 269, Hawaii Revised Statutes (“RPS”).⁸ Although an FIT may generally complement existing utility commitments to purchase

⁶ The Scoping Paper submitted by the Commission, “Feed-In Tariffs: Best Design Focusing Hawaii’s Investigation” (National Regulatory Research Institute, December 2008) (“Scoping Paper”) proposes “Project-based feed-in tariffs” or “PBFiTs.” *Id.* at 1. Blue Planet reserves comment on the potential differences or similarities between PBFiTs and FITs and for convenience generally employs the term FITs throughout this SOP.

⁷ “Energy Agreement Among the State of Hawaii, Division of Consumer Advocacy of the Department of Commerce and Consumer Affairs, and the Hawaiian Electric Companies” dated Oct. 20, 2008 (“Energy Agreement”).

⁸ Use of an FIT in Hawaii to meet RPS goals would be consistent with similar efforts in California and Minnesota. The California Energy Commission’s 2007 Integrated Energy Policy Report, for example, recommended that the California Energy Commission collaborate with the California Public Utilities Commission to develop a report to

renewable energy, an FIT similar to the Proposed FIT appears to have the potential to dramatically accelerate the adoption of renewable energy in Hawaii in manner that rapidly achieves the overarching and controlling policy objective of moving “decisively and irreversibly” away from fossil fuel and towards indigenously produced renewable energy and an ethic of energy efficiency.

2. What are the potential benefits and adverse consequences of PBFiTs for the utilities, ratepayers and the state of Hawaii?

The primary potential benefit of an FIT similar to the Proposed FIT is the rapid achievement of the Energy Agreement’s policy objective of moving “decisively and irreversibly” away from fossil fuel and towards indigenously produced renewable energy and an ethic of energy efficiency. The secondary benefits of an FIT similar to the Proposed FIT include those benefits set forth in the KEMA Report, as set forth above. At this time, the potential adverse consequences of an FIT similar to the Proposed FIT are unknown or unclear to Blue Planet. The potential adverse consequences of the Straw FIT include delaying and increasing the cost of achieving the Energy Agreement’s primary policy objective.

3. Why is or is not the PBFiT the superior methodology to meet Hawaii’s clean energy and energy independence goals?

An FIT similar to the Proposed FIT is superior to the Competitive Bidding Framework⁹ to meet Hawaii’s clean energy and energy independence goals due to its ability to more rapidly achieve the benefits set forth in the KEMA Report, as explained above.

examine the feasibility of establishing a feed-in tariff for projects greater than 20 megawatts in order to meet California renewable energy goals. See California Energy Commission, *2007 Integrated Energy Policy Report* (CEC-100-2007-008-CMF) at 147, available at http://www.energy.ca.gov/2007_energypolicy/index.html.

⁹ See Docket No. 03-0372, Decision and Order No. 23121 (Dec. 11, 2006).

B. Legal Issues

- 4. What, if any, modifications are prudent or necessary to existing federal or state laws, rules, regulations or other requirements to remove any barriers or to facilitate the implementation of a feed-in tariff not based on avoided costs?**

To facilitate the implementation of a feed-in tariff not based on avoided costs it appears to be prudent or necessary to modify the avoided cost ceiling under section 269-27.2, Hawaii Revised Statutes (“HRS § 269-27.2”).

- 5. What evidence must the commission consider in establishing a feed-in tariff and has that evidence been presented in this investigation?**

The Commission must consider evidence on all substantive issues in this proceeding, including evidence concerning whether the FIT is likely to achieve the Energy Agreement’s overarching and controlling policy objective and whether the FIT is likely to fully realize the benefits of an FIT as set forth in the KEMA Report.

C. Role of Other Methodologies

- 6. What role do other methodologies for the utility to acquire renewable energy play with and without a PBFIT, including but not limited to power purchase contracts, competitive bidding, avoided cost offerings and net energy metering?**

The purpose of an FIT is to achieve the Energy Agreement’s primary policy objective. Consistent with that objective, the Proposed FIT supplants the Competitive Bidding Framework for renewable electricity generation that is larger than 5 MW on the island of Oahu and larger than 2.7 MW on the islands of Maui and Hawaii. It also replaces or is intended to replace (i) the rate provided by HRS § 269-27.2 for renewable energy generation smaller than 5 MW on the island of Oahu and smaller than 2.7 MW on the islands of Maui and Hawaii, and (ii) the Schedule Q rate for renewable electricity generation that is smaller than 100 kW. The Proposed FIT is not, however, intended to replace net energy metering.

D. Best Design for a PBFiT or alternative method

- 7. What is the best design, including the cost basis, for PBFiTs or other alternative feed-in tariffs to accelerate and increase the development of Hawaii's renewable energy resources and their integration in the utility system?**

Blue Planet submits an FIT similar to the Proposed FIT is the best design for an FIT insofar as it is most likely to achieve the Energy Agreement's overarching and controlling policy objective and fully realize the FIT benefits set forth in the KEMA Report.

E. Eligibility Requirements

- 8. What renewable energy projects should be eligible for which renewable electricity purchase methods or individual tariffs and when?**

Blue Planet's initial position with regard to this question is as set forth in the Proposed FIT.

F. Analysis of the cost to consumers and appropriateness of caps

- 9. What is the cost to consumers and others of the proposed feed-in tariffs?**

Blue Planet respectfully reserves the right to comment on this question in the course of this proceeding.

- 10. Should the commission impose caps based upon these financial effects, technical limitations or other reasons on the total amount purchased through any mechanism or tariff?**

Blue Planet's initial position with regard to this question is as set forth in the Proposed FIT. In addition, Blue Planet notes that in general annual caps, production caps, size caps and expenditure caps on an FIT appear unlikely to achieve the Energy Agreement's primary policy objective or to fully realize the benefits of an FIT as set forth in the KEMA Report.

G. Procedural Issues

- 11. What process should the commission implement for evaluating, determining and updating renewable energy purchased power mechanisms or tariffs?**

The Commission should evaluate, determine and if necessary update the FIT at intervals of every two to four years.

- 12. What are the administrative impacts to the commission and the parties of the proposed approach?**

The administrative impact to the Commission and the Consumer Advocate is staff time required to perform the review and approval of FIT agreements, and the evaluation and updating of FIT rates and categories. The administrative impact to the HECO Companies is the need for additional engineers for interconnection of renewable energy projects. The administrative impact to the renewable energy industry of the FIT is the reduction of administrative costs on a per-project basis because of the reduction of price, revenue and customer uncertainty and the reduction of delays in project development.

II. PROPOSED FIT

Blue Planet's initial statement of position on the issues in this proceeding are as further reflected in the Proposed FIT, subject to the following exceptions and clarifications.

With regard to the first paragraph in the section titled, "Schedule FIT Agreement," Blue Planet favors deleting the phrase, "made available to the electric system" and inserting in its place the phrase "delivered to the electric system." Blue Planet submits that the phrase "delivered to the electric system" clarifies that the under the Proposed FIT the HECO Companies shall have no right to curtail new renewable energy generation without compensating the generator.

With regard to rates under the table columns labeled "Feed-in Tariff Rate (¢/kW hour)" on pages 4-9, Blue Planet respectfully reserves the right to comment on rates in the further course of this proceeding. In general, Blue Planet favors rates targeted to ensure that the primary policy objective of the Energy Agreement is achieved. Such rates may be equivalent to the rates established in the German feed-in Tariff. *See* KEMA Report at 56-57.

Finally, with regard to the references throughout the Proposed FIT to various appendices and exhibits, Blue Planet's position is that any differences between Proposed FIT and Straw FIT appendices and exhibits should at the appropriate time be resolved in a manner that conforms to the Proposed FIT.

DATED: Honolulu, Hawaii, February 25, 2009.



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SCHEDULE FIT

Feed-in Tariff – Purchases from Renewable Energy Generating Facilities

Definitions:

For the purposes of this Schedule:

- (1) "Biogas" means a gaseous fuel produced by anaerobic decomposition of organic matter.
- (2) "Biomass" means aquatic or terrestrial plant material, vegetation, or agricultural waste, originating in the State of Hawaii, used as a fuel or energy source.
- (3) "Company" means Hawaiian Electric Company, Inc.
- (4) "Concentrating Solar Power Facility" means a Renewable Energy Generating Facility that generates electricity by concentrating Solar Radiation to heat a working fluid that drives a generator.
- (5) "Electrical Capacity" means the installed maximum potential alternating-current electricity generating capacity, in kilowatts, of a Renewable Energy Generating Facility.
- (6) "Hybrid Facility" means a Renewable Energy Generating Facility that generates electricity from two or more Renewable Energy Sources.
- (7) "Hydropower" means the energy of moving water, including wave energy, ocean thermal energy conversion, and tidal energy.
- (8) "Non-Wood-Burning Generating Facility" means a Renewable Energy Generating Facility that generates electricity from Biomass and that is not a Wood-Burning Generating Facility.
- (9) "Offshore Wind Generating Facility" means a Wind Generating Facility that is located in an ocean water depth of at least 20 meters.
- (10) "Onshore Wind Generating Facility" means any Wind Generating Facility that is not an Offshore Wind Generating Facility.
- (11) "Photovoltaic Generating Facility" means a Renewable Energy Generating Facility that generates electricity from unconcentrated Solar Radiation.
- (12) "Renewable Energy" means electricity generated by a Renewable Energy Generating Facility from a Renewable Energy Source.

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- (13) "Renewable Energy Generating Facility" means any identifiable facility, plant, installation, project, equipment, apparatus, or the like, located in the State of Hawaii, placed in service after the effective date of this Schedule, and that generates Renewable Energy from a Renewable Energy Source.
- (14) "Renewable Energy Generator" means any person that owns, controls, operates, manages, or uses a Renewable Energy Generating Facility to produce Renewable Energy from a Renewable Energy Source.
- (15) "Renewable Energy Source" means the following sources of energy:
 - (a) Biomass;
 - (b) Biogas;
 - (c) Geothermal Energy;
 - (d) Landfill Gas;
 - (e) Sewage Treatment Plant Gas;
 - (f) Hydropower;
 - (g) Solar Radiation;
 - (h) Wind.
- (16) "Wood-Burning Generating Facility" means a Renewable Energy Generating Facility that burns wood to generate electricity.
- (17) "Wind Generating Facility" means a Renewable Energy Generating Facility that generates electricity from Wind.

Interconnection

At the request of a Renewable Energy Generator that places a Renewable Energy Generating Facility in service, the Company shall interconnect such Renewable Energy Generating Facility to the electric system of the Company, provided that technical requirements set forth in the Company's Rules relating to interconnection of generating facilities with the Company's electric system, as approved by the Public Utilities Commission, are met. Costs incurred by the Company to meet technical requirements of interconnection shall be allocated so that those costs that benefit a Renewable Energy Generating Facility are borne by the Renewable Energy Generator that uses the Renewable Energy Generating Facility to produce Renewable Energy, in conformity with orders of the Public Utilities Commission relating to distributed generation in the State of Hawaii. Each of the Company and the Renewable Energy Generator shall disclose to the other, within 6 weeks of a request by the other, any and all data, relating to the electric system of the Company or the Renewable Energy Generating Facility of the Renewable Energy Generator, necessary to plan and execute such interconnection in conformity with such technical requirements.

A Renewable Energy Generating Facility shall be designed to operate in parallel with the Company's electric system without adversely affecting the operations of its customers and without presenting safety hazards to personnel of the Company or its customers. The Renewable Energy Generator shall furnish, install, operate and maintain facilities such as relays, switches, synchronizing equipment, monitoring equipment and control and protective devices designated by the Company and specified in the standard Schedule FIT Agreement ("Schedule FIT Agreement") as suitable for parallel operation with the electric system of the Company. The Renewable Energy Generating Facility and systems interconnecting the Renewable Energy Generating Facility with the Company's electric system must be in compliance with all applicable safety and performance standards of the National Electric Code (NEC), the Institute of Electrical and Electronics Engineers (IEEE), and the Company's requirements for distributed generation interconnected with the Company's electric system as provided in the Company's Rules, and subject to any other requirements, including payments, as provided in the Schedule FIT Agreement.

Requests to interconnect a Renewable Energy Generating Facility in parallel with the Company's electric system will be processed in accordance with the procedures in Appendix II.

Schedule FIT Agreement:

The Company shall offer a Schedule FIT Agreement, in the form provided in Appendix I, to any Renewable Energy Generator that requests interconnection of a Renewable Energy Generating Facility to the electric system of the Company under this Schedule. Each such Schedule FIT Agreement shall oblige the Company to take all Renewable Energy generated by the Renewable Energy Generating Facility and made available to the electric system of the Company, and shall oblige the Company to purchase and pay for such Renewable Energy at the feed-in tariff rate of compensation (in cents per kilowatt-hour) set forth in this Schedule. The Company shall compensate the Renewable Energy Generator for such Renewable Energy in an amount no less than the number of kilowatt-hours of such Renewable Energy multiplied by such rate of compensation.

With respect to Renewable Energy generated by a Hybrid Facility and delivered to the electric system of the Company, each such Schedule FIT Agreement shall oblige the Company to take all such Renewable Energy, and shall oblige the Company to purchase and pay for such Renewable Energy generated by the Hybrid Facility from each Renewable Energy Source at the feed-in tariff rate of compensation (in cents per kilowatt-hour) for such Renewable Energy set forth in this Schedule.

Procedures for requesting and executing a Schedule FIT Agreement are provided in Appendix II to this Schedule.

Metering:

The Company, at its expense, shall install a meter to record the flow of Renewable Energy delivered to the electric system of the Company. The Renewable Energy Generator shall, at its expense, provide, install and maintain all conductors, service switches, fuses, meter sockets, meter instrument transformer housing and mountings, switchboard meter test buses, meter panels and similar devices required for service connection and meter installations on the premises of the Renewable Energy Generating Facility in accordance with the Company's Rules.

Any energy delivered to a Renewable Energy Generator by the Company will be metered separately from any Renewable Energy delivered by the Renewable Energy Generator to the Company, either by use of multiple meters or a meter capable of separately recording the net inflow and outflow of electricity.

Purchase of Renewable Energy Delivered by a Renewable Energy Generator to the Company:

The Company shall pay for each kilowatt-hour ("kWh") of Renewable Energy delivered to the Company by a Renewable Energy Generator as follows. The capacity limits stated below shall not limit or pertain to the gross output of the Renewable Energy Generating Facility.

Renewable Energy Source: Biomass	
Wood-Burning Generating Facility Electrical Capacity (kW)	Feed-in Tariff Rate (¢/kWh)
≤150 kW	
> 150 kW and ≤500 kW	
> 500 kW and ≤5000 kW	
> 5000 kW	

Renewable Energy Source: Biomass	
Non-Wood-Burning Generating Facility Electrical Capacity (kW)	Feed-in Tariff Rate (¢/kWh)
≤150 kW	
> 150 kW and ≤500 kW	
> 500 kW and ≤5000 kW	
> 5000 kW	

Renewable Energy Source: Biogas	
Renewable Energy Generating Facility Electrical Capacity (kW)	Feed-in Tariff Rate (¢/kWh)
≤150 kW	
> 150 kW and ≤500 kW	
> 500 kW and ≤5000 kW	
> 5000 kW and ≤20000 kW	

Renewable Energy Source: Geothermal Energy	
Renewable Energy Generating Facility Electrical Capacity (kW)	Feed-in Tariff Rate (¢/kWh)
≤10000 kW	
> 10000 kW	

Renewable Energy Source: Landfill Gas or Sewage Treatment Plant Gas	
Renewable Energy Generating Facility Electrical Capacity (kW)	Feed-in Tariff Rate (¢/kWh)
≤500 kW	
> 500 kW and ≤5000 kW	

Renewable Energy Source: Hydropower	
Renewable Energy Generating Facility Electrical Capacity (kW)	Feed-in Tariff Rate (¢/kWh)
≤500 kW	
> 500 kW and ≤2000 kW	
> 2000 kW and ≤5000 kW	
> 5000 kW and ≤10000 kW	
> 10000 kW and ≤20000 kW	
> 20000 kW and ≤50000 kW	
> 50000 kW	

Renewable Energy Source: Solar Radiation	
Photovoltaic Generating Facility Located on Oahu Electrical Capacity (kW)	Feed-in Tariff Rate (¢/kWh)
≤10 kW	
≥10 kW and ≤100 kW	
≥100 kW and ≤500 kW	
≥500 kW and ≤5000 kW	
≥5000 kW	

Renewable Energy Source: Solar Radiation	
Photovoltaic Generating Facility Located on Maui Electrical Capacity (kW)	Feed-in Tariff Rate (¢/kWh)
≤10 kW	
≥10 kW and ≤100 kW	
≥100 kW and ≤500 kW	
≥500 kW and ≤5000 kW	
≥5000 kW	

Renewable Energy Source: Solar Radiation	
Photovoltaic Generating Facility Located on Molokai Electrical Capacity (kW)	Feed-in Tariff Rate (¢/kWh)
≤10 kW	
≥10 kW and ≤100 kW	
≥100 kW and ≤500 kW	
≥500 kW and ≤5000 kW	

Renewable Energy Source: Solar Radiation	
Photovoltaic Generating Facility Located on Lanai Electrical Capacity (kW)	Feed-in Tariff Rate (¢/kWh)
≤10 kW	
≥10 kW and ≤100 kW	
≥100 kW and ≤500 kW	
≥500 kW and ≤5000 kW	

Renewable Energy Source: Solar Radiation	
Photovoltaic Generating Facility Located on Hawaii Electrical Capacity (kW)	Feed-in Tariff Rate (¢/kWh)
≤10 kW	
≥10 kW and ≤100 kW	
≥100 kW and ≤500 kW	
≥500 kW and ≤5000 kW	
≥5000 kW	

Renewable Energy Source: Solar Radiation	
Concentrating Solar Power Facility Located on Oahu <u>Electrical Capacity (kW)</u>	<u>Feed-in Tariff Rate (¢/kWh)</u>
≤500 kW	
> 500 kW and ≤5000 kW	
> 5000 kW and ≤10000 kW	
> 10000 kW and ≤20000 kW	

Renewable Energy Source: Solar Radiation	
Concentrating Solar Power Facility Located on Maui <u>Electrical Capacity (kW)</u>	<u>Feed-in Tariff Rate (¢/kWh)</u>
≤500 kW	
> 500 kW and ≤5000 kW	
> 5000 kW and ≤10000 kW	
> 10000 kW and ≤20000 kW	

Renewable Energy Source: Solar Radiation	
Concentrating Solar Power Facility Located on Molokai <u>Electrical Capacity (kW)</u>	<u>Feed-in Tariff Rate (¢/kWh)</u>
≤500 kW	
> 500 kW and ≤5000 kW	

Renewable Energy Source: Solar Radiation	
Concentrating Solar Power Facility Located on Lanai <u>Electrical Capacity (kW)</u>	<u>Feed-in Tariff Rate (¢/kWh)</u>
≤500 kW	
> 500 kW and ≤5000 kW	

Renewable Energy Source: Solar Radiation	
Concentrating Solar Power Facility Located on Hawaii <u>Electrical Capacity (kW)</u>	<u>Feed-in Tariff Rate (¢/kWh)</u>
≤500 kW	
> 500 kW and ≤5000 kW	
> 5000 kW and ≤10000 kW	
> 10000 kW and ≤20000 kW	

Renewable Energy Source: Wind	
Onshore Wind Generating Facility Located on Oahu Electrical Capacity (kW)	Feed-in Tariff Rate (¢/kWh)
≤10 kW	
> 10 kW and ≤50 kW	
> 50 kW and ≤250 kW	
> 250 kW and ≤500 kW	
> 500 kW and ≤1000 kW	
> 1000 kW and ≤2500 kW	
> 2500 kW and ≤5000 kW	
> 5000 kW and ≤20000 kW	

Renewable Energy Source: Wind	
Onshore Wind Generating Facility Located on Maui Electrical Capacity (kW)	Feed-in Tariff Rate (¢/kWh)
≤10 kW	
> 10 kW and ≤50 kW	
> 50 kW and ≤250 kW	
> 250 kW and ≤500 kW	
> 500 kW and ≤1000 kW	
> 1000 kW and ≤2500 kW	
> 2500 kW and ≤5000 kW	
> 5000 kW and ≤20000 kW	

Renewable Energy Source: Wind	
Onshore Wind Generating Facility Located on Molokai Electrical Capacity (kW)	Feed-in Tariff Rate (¢/kWh)
≤10 kW	
> 10 kW and ≤50 kW	
> 50 kW and ≤250 kW	
> 250 kW and ≤500 kW	
> 500 kW and ≤1000 kW	
> 1000 kW and ≤2500 kW	
> 2500 kW and ≤5000 kW	
> 5000 kW and ≤20000 kW	

Renewable Energy Source: Wind	
Onshore Wind Generating Facility Located on Lanai <u>Electrical Capacity (kW)</u>	<u>Feed-in Tariff Rate (¢/kWh)</u>
≤10 kW	
> 10 kW and ≤50 kW	
> 50 kW and ≤250 kW	
> 250 kW and ≤500 kW	
> 500 kW and ≤1000 kW	
> 1000 kW and ≤2500 kW	
> 2500 kW and ≤5000 kW	
> 5000 kW and ≤20000 kW	

Renewable Energy Source: Wind	
Onshore Wind Generating Facility Located on Hawaii <u>Electrical Capacity (kW)</u>	<u>Feed-in Tariff Rate (¢/kWh)</u>
≤10 kW	
> 10 kW and ≤50 kW	
> 50 kW and ≤250 kW	
> 250 kW and ≤500 kW	
> 500 kW and ≤1000 kW	
> 1000 kW and ≤2500 kW	
> 2500 kW and ≤5000 kW	
> 5000 kW and ≤20000 kW	

Renewable Energy Source: Wind	
Offshore Wind Generating Facility <u>Years of Agreement Term</u>	<u>Feed-in Tariff Rate (¢/kWh)</u>
Years 1 through 12	
Years 13 through 20	

The Commission shall periodically adjust the Schedule FIT feed-in tariff rates of compensation in accordance with the procedures provided in Appendix III of this Schedule. The Renewable Energy Generator shall receive the feed-in tariff rate of compensation in effect at the time of execution of the Schedule FIT Agreement for the entire term of the Schedule FIT Agreement.

Term of Schedule FIT Agreement:

The term of the Schedule FIT Agreement will be as follows, commencing on the initial delivery of Renewable Energy under the Schedule FIT Agreement from the Renewable Energy Generator to the Company:

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<u>Renewable Energy Source</u>	<u>Term of Agreement</u>
Biomass	20 years
Biogas	20 years
Geothermal Energy	20 years
Landfill Gas	20 years
Sewage Treatment Plant Gas	20 years
Hydropower	20 years
Solar Radiation	20 years
Wind	20 years

Net Energy Metering

A Renewable Energy Generator that is eligible to enter into a net energy metering agreement with the Company shall have a choice of either (1) entering into a net energy metering agreement with the Company, or (2) entering into a Schedule FIT Agreement with the Company.

Penetration Limits for Intermittent Renewable Energy Sources

The obligations of the Company to interconnect a Renewable Energy Generating Facility to the Company's electric system and to offer an Schedule FIT Agreement to a Renewable Energy Generator to purchase and pay for Renewable Energy at a feed-in tariff rate of compensation under this Schedule shall not apply with respect to Renewable Electricity produced by a Renewable Energy Generating Facility that is (i) a Wind Generating Facility, and that is placed in service after December 31 of the year following the year during which the aggregate Electrical Capacity of Renewable Energy Generating Facilities that are Wind Generating Facilities as to which technical requirements for interconnection have been met equals or exceeds 25 per cent of the peak demand for such electrical system, provided that the Public Utilities Commission may increase, by rule or order, such aggregate Electrical Capacity limit above 25 per cent of such peak demand, or (ii) a Photovoltaic Generating Facility or a Concentrating Solar Generating Facility, and that is placed in service after December 31 of the year following the year during which the aggregate Electrical Capacity of Renewable Energy Generating Facilities that are Photovoltaic Generating Facilities or Concentrating Solar Generating Facilities as to which technical requirements for interconnection have been met equals or exceeds 50 per cent of the peak demand for such electrical system, provided that the Public Utilities Commission may increase, by rule or order, such aggregate Electrical Capacity limit above the above-referenced 25 per cent and 50 per cent peak demands.

Queuing Procedures:

Requests for interconnection of Renewable Energy Generating Facilities under this Schedule shall be administered on a first-ready, first-to-interconnect basis, modeled after the queuing procedures proposed by the Midwest Independent Transmission System Operator, Inc. ("Midwest ISO") and conditionally accepted by the Federal Energy

HAWAIIAN ELECTRIC COMPANY, INC.

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Regulatory Commission. See 124 FERC ¶ 61,183, Midwest Independent Transmission System Operator, Inc., docket No. ER08-1169-000, Order Conditionally Accepting Tariff Revisions and Addressing Queue Reform, August 25, 2008.

Renewable Energy Certificates:

Any certificate, credit, allowance, green tag, or other transferable indicia or environmental attribute, verifying the generation of a particular quantity of energy from a Renewable Energy Source, indicating the generation of a specific quantity of Renewable Energy by a Renewable Energy Generating Facility, or indicating a Renewable Energy Generator's ownership of any environmental attribute associated with such generation, is the property of the Renewable Energy Generator and freely assignable by the Renewable Energy Generator.

BEFORE THE PUBLIC UTILITIES COMMISSION OF THE
STATE OF HAWAII

In the Matter of

PUBLIC UTILITIES COMMISSION

Instituting a Proceeding to Investigate the
Implementation Of Feed-in Tariffs.

DOCKET NO. 2008-0273

CERTIFICATE OF SERVICE

I HEREBY CERTIFY that on this date a copy of the foregoing document was
duly served upon the following individuals by placing a copy of same in the United States Mail,
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